SUMMARY OF CLAIMS

Claims 6, 10-12, 15-56, and 58-61 are cancelled. Claims 1-5, 8, 9, 13, 14, and 57 are amended. Claims 1-5 and 7-9, 13, 14, and 57 are pending. Withdrawn claims 31-56 and 58-61 were cancelled without prejudice and Applicants reserve the right to pursue these claims in a later divisional application. Reconsideration is respectfully requested in light of the following remarks.

REMARKS

I. Renumbering of Claims

Examiner noted that claim 25 was missing in the originally filed claims and in the amended claims filed 10/19/2007. Applicants wish to thank the Examiner for re-numbering the claims to correct the omission.

II. Oath/Declaration

Applicants attempted to execute a new declaration, but mail sent to the last known address of inventor Keith Steward was returned. Applicants have continued their attempts to contact the inventor.

III. Specification

- A. The Examiner objected to the disclosure for containing an embedded hyperlink and/or other form of browser-executable code in paragraph 0090. Applicants provide a replacement paragraph 0090 that is free of the offending browser-executable code. Hence, Applicants respectfully ask Examiner to withdrawal the objection.
- B. The Examiner objected to the informal usage of registered marks in the specification. More specifically, the Examiner noted that the terms BIOSIS, GENBANK AND AFFYMETRIX GENECHIP appear in the specification without all the letters capitalized and without the trademark symbol.

Applicants have searched the specification for informal usage of registered marks and made corrections to the specification were appropriate. Replacement paragraphs 0009, 0010, and 0074, free of informal usage of registered marks, are provided and hence, Applicants request Examiner to withdraw the objection.

IV. Claim Objections

A. Objection of Claim 5 under 35 U.S.C. §1.75

Applicant is advised that should claim 5 be found allowable, claim 6 will be objected to under 37 C.F.R. §1.75 as being a substantial duplicate thereof. Applicants have cancelled claim 6, rendering the objection moot.

B. Objection of Claim 25 for Informality

Claim 25 is objected to on grounds of informality. The objection is now moot as Applicants have cancelled the claim.

V. Claim Rejections

A. Claim Rejections under 35 U.S.C. §112

Claims 1-5, 7-9, 13, 14, and 57 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1 and 57

Claims 1 and 57 are rejected for allegedly lacking insufficient antecedent basis for the limitation "each such reaction." The rejection is now moot as Applicants have deleted the offending term and replaced it with "the disease-related pathway." Support for this term is found in the claim as originally filed and in claim 1 of Provisional Patent Application 60/353176.

Claim 1

Claim 1 is rejected for allegedly lacking insufficient antecedent basis for the limitation "the stored concepts." The rejection is now moot as Applicants have deleted the offending term and

Application No.: 10/632,099

Reply to Office Action dated November 19, 2007

replaced it with "the stored genomics information." Support for this term is found in paragraphs 0066, 0067, and 0073.

Claim 2

Claim 2 is rejected for allegedly lacking sufficient clarity for the use of the term "the proteins that result." The rejection is now moot as Applicants have deleted the offending term and replaced it with "proteins expressed from said genes" as suggested by Examiner.

Claims 3-6

Claims 3-6 are rejected for allegedly lacking insufficient antecedent basis for the limitation "the data." The rejection is now moot as Applicants have deleted the offending term and replaced it with "said genomics information." Support for this term can be found in paragraphs 0066, 0067, and 0073 and claim 1 as originally filed.

Claims 8 and 9

Claims 8 and 9 are rejected for allegedly lacking clear antecedent basis for the limitation "the candidate drug discovery targets." The rejection is now moot as Applicants have deleted the word "candidate." Applicants respectfully contend that the word "candidate" is redundant when used to refer to a drug discovery target as all drug discovery targets are candidates for further development. Support for the deletion of this term can be found in the preamble of claim 1 as originally filed.

Claims 13 and 14

Claims 13 and 14 are rejected for allegedly lacking clear antecedent basis for the limitation "gene product." The rejection is now moot as Applicants have restated the limitation to be a "protein expressed from said gene."

Claim 14

Claim 14 is rejected for allegedly lacking clarity as to what relationships would be removed from or how one skilled in the art could determine what specifically comprises the relationships to distinguish them by said step. The rejection is now moot as Applicants have amended claim 14 to state that the method "identifies relationships between genes and/or proteins expressed from said

Response dated May 19, 2008 Application No.: 10/632,099

Reply to Office Action dated November 19, 2007

genes that are at least two steps removed from each other in a disease-related pathway." Support for this term is found in claim 1 as originally filed.

B. Claim Rejections under 35 U.S.C. §101

Claims 1-5, 7, 8, 13, 14, and 57 are rejected under 35 U.S.C. 101 for allegedly being directed to non-statutory subject matter. Applicants traverse the rejection.

Applicants amended independent claims 1 and 57 to include an accessing step, thereby providing a useful, tangible and concrete final result. Support for the claim amendments can be found in the specification as filed. More specifically, paragraph 0066 describes and information system wherein genomics information is accessed. Paragraph 0155 discloses displaying computergenerated graphical displays of the profiles. Furthermore, use of computer generated data necessarily requires the accessing or outputting of results. Therefore, Applicants respectfully request the withdrawal of the rejection of claims 1-5, 7, 8, 13, 14, and 57 under 35 U.S.C. 101.

C. Claim Rejections under 35 U.S.C. §102

In order for Applicant's claims to lack novelty under 35 U.S.C. § 102, each and every element of the claimed invention must be disclosed in a single prior art reference. For a reference to be considered a prior art reference under 35 U.S.C. §102(b), the reference must be published in this or a foreign country more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7, 8, 13, 14, and 57 are rejected under 35 U.S.C. §102(b) over Qu et al.

Claims 1-5, 7, 8, 13, 14, and 57 are rejected under 35 U.S.C. §102(b) as being anticipated by Qu et al. Applicants traverse the rejection.

Applicants respectfully note that Qu et al. was published around April 8, 2002 as evidenced by the date stamp provided by the University of Wisconsin Library. Attached. U.S. Patent Application No. 10/632,099. was filed on August 1, 2003 and claims priority to PCT application PCT/US03/03006 filed on February 3, 2003. The PCT application claims priority to U.S. Provisional Application No. 60/353,176 filed on February 4, 2002. Because Qu et al. was published after the filing date of the '176 application, it is not prior art to any claim entitled to the priority date.

Application No.: 10/632,099

Reply to Office Action dated November 19, 2007

At least claims 1-5, 7, 8, 13, 14, and 57 of the instant application are supported by at least the

following disclosures in the provisional application and thereby are entitled to a priority date before

Qu et al. was published.

Claim 1

Claim 1 of the instant application, as amended, finds support in bridging paragraph of pages

10 and 11 and in claim 1 of the provisional application.

Claim 2

Claim 2 of the instant application, as amended, finds support in the last full paragraph on

page 10, first two full paragraphs on page 11, and claim 2 of the provisional application.

Claim 3

Claim 3 of the instant application, as amended, finds support in the last full paragraph on

page 4, first full paragraph on page 10, and claim 3 of the provisional application.

Claim 4

Claim 4 of the instant application, as amended, finds support in the last full paragraph on

page 4, first full paragraph on page 10, and claim 4 of the provisional application.

Claim 5

Claim 5 of the instant application, as amended, finds support in the last full paragraph on

page 4, first full paragraph on page 10, and claim 5 of the provisional application.

Claim 7

Claim 7 of the instant application, as amended, finds support in the third full paragraph on

page 5 to the first full paragraph on page 8, and claim 7 of the provisional application.

3- Atty. Docket No.: 27763-705.501

Application No.: 10/632,099

Reply to Office Action dated November 19, 2007

Claim 8

Claim 8 of the instant application, as amended, finds support in the first full paragraph on

page 11, and claim 4 of the provisional application.

Claim 13

Claim 13 of the instant application, as amended, finds support in the last full paragraph on

page 4, last full paragraph on page 10, and claim 9 of the provisional application.

Claim 14

Claim 14 of the instant application, as amended, finds support in the first two paragraphs on

page 5, the last full paragraph on page 10 and claim 5 of the provisional application.

Claim 57

Claim 57 of the instant application, as amended, finds support in the last full paragraph on

page 10 and the bridging paragraph on pages 10 and 11.

Applicants respectfully assert that at least claims 1-5, 7, 8, 13, 14, and 57 are supported by

disclosure in Provisional Application No. 60/353,176. Based on the filing date of the provisional

application, Qu et al. cannot be applied as a prior art reference. Therefore, Applicants respectfully

request Examiner withdrawal the rejection of claims 1-5, 7, 8, 13, 14, and 57 under 35 U.S.C.

§102(b).

D. Claim Rejections under 35 U.S.C. §103

Claims 16, 17 and 28 are rejected under 35 U.S.C. 103(a) over Qu et al. in view of Bura et al.

Claims 16, 17 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Qu et

al., as applied to claims 1-5, 7, 8, 13, 14, and 57 above, further in view of Bura et al. The rejection is

now moot as Applicants have cancelled claims 16, 17, and 28.

E. Double Patenting

Claims 1-5, 7, 8, 13, and 14 are provisionally rejected on the ground of nonstatutory

obviousness-type double patenting as being unpatentable over claims 1-25 of copending Application

Response dated May 19, 2008 Application No.: 10/632,099

Reply to Office Action dated November 19, 2007

No. 10/502,420. Applicants are invited to submit a Terminal Disclaimer to overcome the rejection. As this is a provisional rejection, Applicants will address the rejection upon indication of allowable subject matter by the Examiner.

Application No.: 10/632,099

Reply to Office Action dated November 19, 2007

CONCLUSION

Applicants submit that this paper fully addresses the Office Action mailed November 19, 2007. Should the Examiner have any question, the Examiner is encouraged to telephone the undersigned attorney at (650) 565-3895.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit account No. 23-2415 (Attorney Docket No.: 27763-705.501) for any matter in connection with this response, including any fee for extension of time, which may be required.

Respectfully submitted,

WILSON SONSINI GOODRICH & ROSATI

Dated: May 19, 2008

650 Page Mill Road Palo Alto, CA 94304-1050 (650) 493-9300 Client No. 021971

-16-

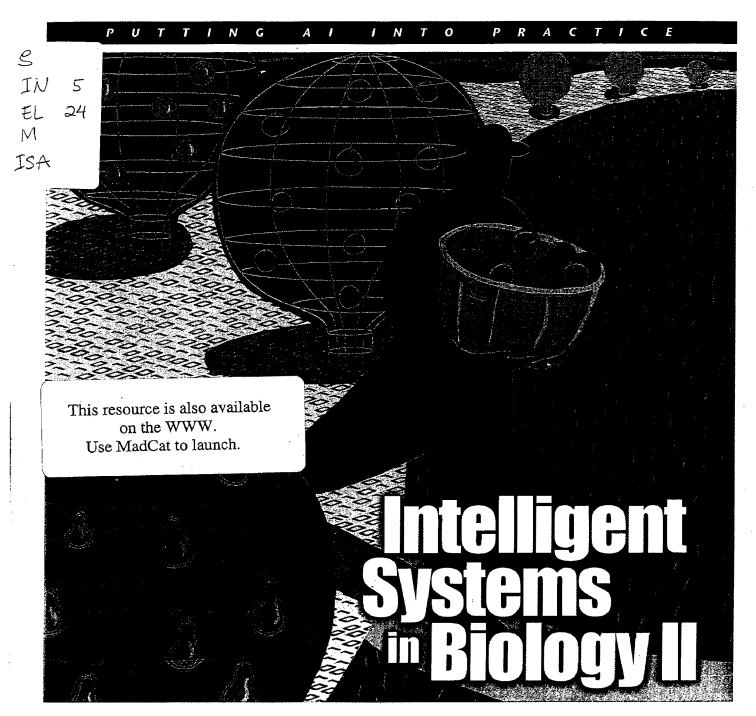
Intelligent Systems

Also in this issue:

Urban search and rescue robots:
from tragedy to technology

Landmine detection
research pushes forward

Semantic Web annotations





D-f-- Off O-----



http://computer.org/intelligent

DEPARTMENTS

- From the Editor in Chief **Nigel Shadbolt** Working Smarter, Not Harder
- Intelligencer Keri Schreiner Landmine Detection Research Pushes Forward, despite Challenges
- **Perspectives Marjory Blumenthal** Frontiers at the Interface between Computing and Biology
- Al in Space Daniel E. Cooke and Butler P. Hine III Virtual Collaborations with the Real: NASA's New Era in Space Exploration
- **Trends & Controversies** 70 Steffen Staab Ontologies' KISSES in Standardization
- **Histories & Futures Angela Davids** Urban Search and Rescue Robots: From Tragedy to Technology
- Intelligent Transportation Systems 84 Shiu Kit Tso, Ka Lun Fan, Yongde Zhang, and Chun Man Chan An Automated Gas Station Attendant
- Internet Services 88 Giovanni Flammia The Web: A Communication Medium for Health Care
 - 54 Computer Society Membership Info
 - **62** Advertiser Index

Copyright and reprint permissions: Abstracting is permitted with credit to the source. Libraries are permitted to photocopy beyond the limits of US copyright law for the private use of patrons 1) those post-1977 articles that carry a code at the bottom of the first page, provided the per-copy fee indicated in the code is paid through the Copyright Clearance Center, 222 Rosewood Drive, Danvers, MA 01923; and 2) pre-1978 articles without fee. For other copying, reprint, or republication permissions, write to the Copyright and Permissions Department, IEEE Service Center, 445 Hoes Lane, Piscataway, NJ 08855-1331. Copyright © 2002 The Institute of Electrical and Electronics Engineers, Inc. All rights reserved.

AN AAAI SPONSORED JOURNA

Editor in Chief **Nigel Shadbolt**

University of Southhampton nrs@ecs.soton.ac.uk

Associate Editor in Chief **Austin Tate** University of Edinburgh a.tate@ed.ac.uk

EDITORIAL BOARD

Richard Benjamins Intelligent Software Components

> Richard J. Dovle Jet Propulsion Lab

Douglas Dyer DARPA

Dieter A. Fensel

Vrije Universiteit Amsterdam Yolanda Gil

University of Southern California C. Lee Giles

NEC Research Institute

Kristian I. Hammond University of Chicago

James V. Hansen **Brigham Young University**

James A. Hendler University of Maryland

Haym Hirsh Rutgers University

COLLEGE WENDTLIE Se June Hong IBM T.J. Watson Research Center

> Eric Horvitz Microsoft Research

Craig Knoblock University of Southern California

Robert Laddaga

Massachusetts Institute of Technology Richard H. Lathrop

University of California, Irvine Robin R. Murphy

University of South Florida Daniel E. O'Leary

University of Southern California

Alun Preece

University of Aberdeen

Paul S. Rosenbloom University of Southern California

Howard E. Shrobe Massachusetts Institute of Technology

> Rudi Studer University of Karlsruhe

William R. Swartout University of Southern California

> Mark L. Swinson DARPA

Milind Tambe University of Southern California

> David L. Waltz **NEC Research Institute**

> > Ronald Yager Iona College

CS MAGAZINE **OPERATIONS COMMITTEE**

Sorel Reisman (chair), James H. Aylor, Jean Bacon, Thomas J. (Tim) Bergin, Wushow Chou, William I. Grosky, Steve McConnell, Ken Sakamura, Mahadev Satyanarayanan, Nigel Shadbolt, Munindar P. Singh, Francis Sullivan, James J. Thomas, Yervant Zorian

CS PUBLICATIONS BOARD

Rangachar Kasturi (vice president), Jean Bacon, Mark Christensen, George Cybenko, Thomas Keefe, Richard A. Kemmerer, Gabriella Sannitti di Baia, Steven L. Tanimoto, Anand Tripathi